

What is Claimed Is:

1. A medical syringe assembly comprising:

a tubular barrel having a first opening and a second opening at opposite ends with a wall extending between said ends, said wall having an inner surface;

a stopper slidably received in said tubular barrel and having a portion in slidable engagement with said inner surface of said tubular barrel; and

a lubricant disposed over a limited area of at least one portion of said inner surface of said tubular barrel whereby a sufficient amount of said lubricant is available to reduce friction between said inner surface and said stopper.

2. A medical syringe assembly according to Claim 1, wherein said lubricant is provided on said inner surface portion extending completely circumferentially around said inner wall but extending axially only from near said first opening along a distance that is less than an entire length of said inner surface.

3. A medical syringe assembly according to Claim 2, wherein said lubricant extends from near said first opening of said tubular barrel along a distance which is approximately equal to an axial length of said stopper.

4. A medical syringe assembly according to Claim 1, wherein said stopper has an outer engagement surface and said lubricant is provided on a portion of said outer surface that is less than an axial length of said stopper.

5. A medical syringe assembly according to Claim 1, wherein said stopper includes an annular rib having an outer surface, and said lubricant is provided only on said outer surface of said annular rib.

5 6. A medical syringe assembly according to Claim 1, wherein said lubricant is provided on said inner surface over an area extending completely circumferentially around said inner surface but extending axially from near said first opening along only a minor portion of a length of said tubular barrel, and wherein said lubricant is additionally provided on an engagement surface of said stopper in an annular pattern having an axial length smaller than an axial length of said
10 stopper.

7. A medical syringe assembly according to Claim 1, wherein said syringe is formed of glass.

8. A medical syringe assembly according to Claim 1, wherein said syringe is formed of a plastic material.

15 9. A medical syringe assembly according to Claim 1, wherein said lubricant comprises silicone.

10. A method of lubricating a medical syringe assembly having a tubular barrel with an inner wall using an applicator that is selectively received within the tubular barrel comprising the steps of:

(a) moving the applicator into the tubular barrel;

5 (b) moving the applicator within the tubular barrel to thereby deposit a lubricant on the inner wall of the tubular barrel;

(c) moving the applicator a preselected axial distance within the tubular barrel that is less than an axial length of the inner wall of the tubular barrel while performing step (b); and

10 (d) removing the applicator from the barrel when the desired portion of the tubular barrel has been lubricated.

11. A method according to Claim 10, wherein the preselected axial distance of step (c) is a relatively minor portion of the axial length of the inner wall of the tubular barrel.

15 12. A method of Claim 10, wherein step (b) is performed by rotating the applicator within the barrel.

20 13. A method of Claim 10, wherein the syringe assembly includes a stopper and the method further comprises coating a portion of the stopper with a lubricant over a circumferential area less than the total circumferential area of the stopper.

14. A method of Claim 13, wherein the stopper includes at least one annular rib having an outer surface and the method further comprises pattern coating the outer surface of the rib with the lubricant.

15. A method according to Claim 14, wherein the lubricant is silicone.

16. A method of lubricating a syringe assembly including a stopper that is received with a syringe barrel, comprising the steps of:

(a) selecting a portion of the stopper that has an axial length that is less than a total axial length of the stopper; and

(b) applying a lubricant only to the portion from step (a).

17. The method of claim 16, wherein step (b) includes masking another portion of the stopper and applying the lubricant to the unmasked portion of step (a).

18. The method of claim 16, wherein the portion of step (a) comprises an annular rib and step (b) includes pressing the lubricant onto the rib.

19. The method of claim 16, wherein the syringe assembly includes a barrel having an inner wall that slidably engages the stopper portion of step (a) and the method further comprises coating a portion of the inner wall with a lubricant such that less than an entire length of the inner wall is lubricated.

20. The method of claim 19, wherein the inner wall portion is approximately equal to a length of the stopper